

SKELETAL SYSTEM - WORKSHEET # 5

THE CAT SKELETON

There are many similarities between the skeletal system of the cat and human. The overall arrangements of the axial and appendicular skeletons are very similar. But, because of slightly different body plan, musculature, means of locomotion, and adaptation to a different ecological niche, there are differences.

Listed below are a few areas where differences might exist, and an area for your notations of these differences. This list of possible differences is not all inclusive. Enter whatever information you can find regarding these differences, and do not overlook the power of observation! You may find other differences in addition to those listed below which may be entered.

HUMAN

CAT

1. CRANIAL
2. HYOID BONE
3. CLAVICLE
4. NUMBER OF VERTEBRAE
 - A) CERVICAL
 - B) THORACIC
 - C) LUMBAR
 - D) SACRAL
 - E) CAUDAL
5. NUMBER AND ARRANGEMENT OF BONES IN PAWS
 - A) CARPALS
 - B) METACARPALS
 - C) PHALANGES OF FOREFEET
 - D) TARSALS
 - E) METATARSALS
 - F) PHALANGES OF HINDFEET
6. STERNUM
 - A) NUMBER OF BONES
 - B) RELATIVE SIZES OF BONES
7. OTHER AREAS

INFORMATION SHEET ON THE CAT SKELETON

AXIAL SKELETON

SKULL			VERTEBRAL COLUMN		THORAX	
cranial	frontal	2	cervical vertebrae	7	ribs	26
	parietal	2	thoracic vertebrae	13	sternum	1
	interparietal	1	lumbar vertebrae	7		
	occipital	1	sacral vertebrae	1		
	ethmoid	1	caudal vertebrae	21		
	sphenoid	1				
	temporal	2				
	premaxilla	2				
	maxilla	2				
	palatine	2				
facial	vomer	1				
	maxilloturbinal	2				
	nasal	2				
	lacrymal	2				
	malar (jugal, zygomatic)	2				
	mandible	1				
	tympanohyal (oid)	2				
hyoid	stylohyal (oid)	2				
	epihyal (oid)	2				
	ceratohyal (oid)	2				
	basihyal (oid)	1				
	thyrohyal (oid)	2				

APPENDICULAR SKELETON

THORACIC APPENDAGE

shoulder girdle	scapula	2	hand	carpus	scapholunar	2
	clavicle	2			triquetral (cuneiform)	2
arm	humerus	2		metacarpus	pisiform	2
forearm	radius	2			trapezium	2
	ulna	2			trapezoid	2
					capitate (magnum)	2
					hamate (unciform)	2
						10
				phalanges	proximal	10
					middle	10
					distal	8

PELVIC APPENDAGE

pelvic girdle	innominate	2	foot	tarsus	astragalus	2	
leg	{	femur			2	calcaneus	2
		patella			2	scaphoid (navicular)	2
		tibia			2	internal cuneiform	2
		fibula			2	middle cuneiform	2
						external cuneiform	2
				cuboid	2		
				metatarsus	10		
				phalanges	proximal	8	
					middle	8	
					distal	8	



